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**REMARKS**

Claim 1 was rejected under 35 USC 102(b) as being anticipated by Moore (US 20030024934). Claims 1 and 5 were rejected under 35 USC 102(b) as being anticipated by Rosen et al. (US 6868981). Claims 1, 5-15, 18-22 were rejected under 35 USC 102(b) as being anticipated by Middleton et al (US 3365897). Claims 2-4 and 16, 17 were rejected under 35 USC 103(a) as being unpatentable over Middleton as applied to claim 1 above and further in view of Weiser (US 6133330) and Merrill (US 20040048049).

**Claim 1 anticipated by Moore (US 20030024934).**

Claim 1 was rejected under 35 USC 102(b) as being anticipated by Moore (US 20030024934). The Applicant respectfully traverses this rejection and requests reconsideration. The Applicant calls the Examiner's attention to the Moore reference specifically that the Moore reference teaches a double wall tank (with both walls made out of hot rolled carbon steel plate). (see paragraph 34). The reference fails to teach the use of a thermal protection system as understood in the aerospace industry or the present specification (calling for semi-rigid protection system such as ceramic tiles). Furthermore, the Moore reference specifically teaches away from cryogenic applications as claimed by the present invention. Paragraph 8 specifically distances the application from cryogenic applications stating that cryogenic tanks "address problems of extreme cold and ductility in conventional steel tanks. Conversely, the instant invention relates more specifically to fire hazards."

**Claims 1 and 5 anticipated by Rosen et al. (US 6868981).**

Claims 1 and 5 were rejected under 35 USC 102(b) as being anticipated by Rosen et al. (US 6868981). The Applicant respectfully traverses and requests reconsideration. The Rosen reference fails to teach a foam assembly affixed to the tank wall; a first solid film bonded to the outer surface to form an outer bonding surface; or a thermal protection system as understood in the aerospace field. The Rosen reference teaches a tank, with a honeycomb structure (not referenced anywhere as foam) attached. The "sandwich structure" reference by the Examiner is actually taught as titanium and Kevlar skins not a solid film as claimed by the present invention. Furthermore, the thermal protection system claimed by the present invention is not present in the

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Rosen reference. Nothing in the Rosen reference teaches a thermal protection system as claimed by the present invention. The only elements bonded to the outer skin are heating elements 60.

**Claims 1, 5-15,18-22 anticipated by Middleton et al (US 3365897).**

Claims 1, 5-15,18-22 were rejected under 35 USC 102(b) as being anticipated by Middleton et al (US 3365897). The Applicant respectfully traverses this rejection. First, the Middleton reference teaches the use of open cell honeycomb and not a foam assembly as claimed by the present invention. Furthermore it is significant that the Middleton reference teaches the laying up of additional honeycomb and cloth assemblies to the outside rather than the use of a semi-rigid thermal protection system (such as ceramic tiles) as contemplated by the present invention. This is significant, because Middleton's structure fails to require the production of a uniform outer bonding surface as claimed by the present invention. This is because Middleton is not attempting to bond a semi-rigid thermal protection system to the outer surface. The nature of Middleton's outer (not thermal protection system) assembly is that it will conform during manufacturing to the outer surface. The Applicant respectfully requests reconsideration.

**Claims 2-4 and 16,17 were rejected under 35 USC 103(a)**

Claims 2-4 and 16,17 were rejected under 35 USC 103(a) as being unpatentable over Middleton as applied to claim 1 above and further in view of Weiser (US 6133330) and Merrill (US 20040048049). The Applicant respectfully requests reconsideration in light of the aforementioned remarks and attendant amendments. The Applicant respectfully incorporates the traversal of the Middleton reference. Furthermore, the Applicant notes that the references either alone or in combination fail to teach the generation of a uniform outer surface over a foam assembly and the bonding of a semi-rigid thermal protection thereto as claimed by the present invention. The Applicant, therefore respectfully requests reconsideration.

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**CONCLUSION**

The Applicants would like to thank the Examiner for his assistance. All claims are presently in condition for allowance.

Should the Examiner have any questions or comments that would place the application in better condition for allowance, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,



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